Serial No.: 10/782,585 7614-US1

## In the claims:

Substitute the following claims for the claims currently on file.

- 1. Cancel claim 1
- 2. Cancel claim 2
- 3. Cancel claim 3
- 4. Cancel claim 4
- 5. Cancel claim 5
- 6 Cancel claim 6
- 7. Cancel claim 7
- 8. Cancel claim 8
- 9. Cancel claim 9
- 10. Cancel claim 10
- 11. (Currently Amended) Apparatus, comprising:

an advanced trigger module, for generating at least a first advanced trigger event indicator a plurality of trigger condition indicative signals in response to trigger events occurring in at least one input signal;

a multiplexer, for receiving from said advanced trigger module each of a said plurality of trigger condition indicative signals and selecting therefrom one of said trigger condition indicative signals for further processing; and

an event counter module, for counting the number of said at least first trigger events said selected trigger condition indicative signals occurring during a predefined time period to establish thereby a rate of occurrence of said at least first event selected trigger condition indicative signals.

Serial No.: 10/782,585 7614-US1

12. Cancel claim 12

13. (Currently Amended) The apparatus of claim 11, further comprising:

a time stamp module, for associating at least some of said trigger event-occurrences of at least one trigger condition said selected trigger condition indicative signals with a respective time stamp for subsequent processing by said display processor.

- 14. (Currently Amended) The apparatus of claim 13, wherein each of said trigger events selected trigger condition indicative signals is associated with a time stamp.
- (Currently Amended) The apparatus of claim 11, further comprising:

a time stamp module, for associating at least some of said trigger event-occurrences of at least one trigger condition said selected trigger condition indicative signals with a respective time stamp for subsequent processing by a fast Fourier transform(FFT) module;

said FFT module for processing at least one time stamp associated trigger <del>occurrence</del> condition indicative signal to provide thereby a spectral profile of occurrences of said trigger event.

- 16. (Original) The apparatus of claim 11, wherein said trigger event comprises at least one of a glitch condition, a pulse width violation condition, a slew-rate violation condition, a runt condition, a time-qualified runt condition, an abnormal pulse condition, a time-qualified abnormal pulse condition, a timeout condition, a window criteria condition, a set-up and hold violation, a logic pattern, a logic state and an edge condition.
- 17. Cancel claim 17.
- 18. (Original) The apparatus of claim 15, further comprising:

an auxiliary trigger module, for asserting a trigger condition in response to a spectral profile correlating to a predefined spectral profile within a threshold level of accuracy.